

CLAIMS

What is claimed and desired to be secured by Letters Patent is:

1. A method of verifying a state of an element comprising:
determining if the state of the element is equal to an expected state using a verify circuit; and
outputting a valid signal if the state of the element is equal to said expected state.
2. The method of claim 1, wherein the element is a fuse.
3. The method of claim 1, wherein the element is a thin oxide gated fuse.
4. The method of claim 1, including sensing the state of the element.
5. The method of claim 1, including generating a high signal if the state of the element is equal to said expected state.
6. The method of claim 1, including generating a low signal if the state of the element is not equal to said expected state.

7. The method of claim 1, wherein determining the state of the element includes determining a state of first and second gated fuses.

8. The method of claim 1, wherein outputting a valid signal includes determining if the state of both first and second thin gate-ox fuses is equal to a first and second expected states.

9. A method for verifying a state of a memory device comprising:
comparing a state of a first gated fuse to a first expected state, and generating a first signal;
comparing a state of a second gated fuse to a second expected state, and generating a second signal; and
outputting a valid signal if both said first and second signals are the same.

10. The method of Claim 9, including outputting a valid signal if both said first and second signals are high.

11. The method of Claim 9, wherein said second expected state is an inverse of said first expected state.

12. The method of Claim 9, wherein said first and second gated fuses are thin oxide gated fuses.

13. The method of Claim 9, including determining if said state of said first gated fuse is equal to said first expected state.

14. The method of Claim 9, including determining if said state of said second gated fuse is equal to said second expected state.

15. The method of Claim 9, including mirroring reference and fuse currents.

16. The method of Claim 15, including comparing said reference and fuse currents.

17. A method for verifying a state of a thin gate-ox fuse memory device, comprising:

- setting a first expected state;
- sensing a state of a first gate-ox fuse;
- determining if said state of said first gate-ox fuse is equal to said first expected state and generating a first signal;
- setting a second expected state;
- sensing a state of a second gate-ox fuse;
- determining if said state of said second gate-ox fuse is equal to said second expected state and generating a second signal; and

generating a valid output if both said first and second signals are the same.

18. The method of Claim 17, wherein said second expected state is an inverse of said first expected state.

19. A verify device comprising at least one current amplifier qualified by a data input.

20. A memory device comprising:
at least one memory cell having at least one gated fuse;
at least one reference cell;
at least one verify circuit connected to said memory cell and said reference cell and adapted to sense a state of said at least one gated fuse;
at least one exclusive nor gate connected to said verify circuit; and
a logic and gate connected to said exclusive nor gate and adapted to generate a valid signal.